

REMARKS

In the present amendment, claims 1, 2, 8, 9, 10, and 15 have been amended and claims 3-7 and 11-14 have been cancelled without prejudice to or disclaimer of the subject matter recited therein. Therefore, claims 1, 2, 8-10, and 15-30 are pending in the application, with claims 1, 2, 9, 16, 17, and 24 being independent claims. Of the pending claims, claims 1, 2, 8-10, and 15 are under consideration, and claims 16-30 are withdrawn from consideration.

Election/ Restrictions

The restriction requirement has been maintained, and the requirement has been made final. In response, Applicants respectfully request reconsideration of the requirement.

Objection to the Specification

The Office Action objects to the disclosure because the figure description does not show sequence identifiers for the recited sequences. In response, Applicants note that the specification has been amended by the insertion of sequence identification numbers.

Claim Rejections – 35 U.S.C. § 101

The Office Action rejects claims 1-4, 7, 9, 10, 11, and 14 under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. In response, and without acquiescing to or agreeing with the rejection, Applicants note that claims

3-7 and 11-14 have been cancelled, and claims 1, 2, 9, and 10 have been amended to recite "isolated" as suggested by the Examiner. Applicants respectfully request withdrawal of the rejections.

Claim Rejections – 35 U.S.C. § 112, second paragraph

The Office Action rejects claims 2, 4, and 9 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. The Office asserts that it is not clear if the claims encompass the full-length of the recited sequences, which may comprise a deletion, substitution, and/or addition of amino acids, or if any portions or fragments thereof are addressed. In response, and without acquiescing to or agreeing with the rejection, Applicants note that claim 4 has been cancelled and claims 2 and 9 have been amended by deletion of the allegedly objectionable phrases. Accordingly, Applicants respectfully submit that the rejections are moot and should be withdrawn.

Claim Rejections – 35 U.S.C. § 112, first paragraph

The Office Action rejects claims 1-15 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In response, and without acquiescing to or agreeing with the rejections, applicants note that claims 3-7 and 11-14 have been cancelled and claims 2 and 9 have been amended to delete the sections relating to "a deletion, substitution, and/or addition of one or several amino acids" of SEQ ID NOS: 1 or 3. Applicants respectfully request withdrawal of the rejection for lack of written description.

The Office Action rejects claims 1-15 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. In response, and without acquiescing to or agreeing with the rejections, applicants note that claims 3-7 and 11-14 have been cancelled and claims 2 and 9 have been amended to delete the sections relating to “a deletion, substitution, and/or addition of one or several amino acids” of SEQ ID NOS: 1 or 3. Applicants respectfully request withdrawal of the rejection for lack of enablement.

The Office Action further rejects claim 7 and 14 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. In response, and without acquiescing to or agreeing with the rejections, applicants note that claims 7 and 14 have been cancelled. Therefore, the enablement rejection of claims 7 and 14 is moot and withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 102(b)

The Office Action rejects claims 1-15 under 35 U.S.C. § 102(b) as allegedly anticipated by Kawai et al. (Nature, 2001, Vol. 409, pp. 685-690) (“KAWAI”). The rejection asserts that KAWAI teaches the isolation of a polynucleotide from mouse that has 100% homology to SEQ ID NO: 2 of the present application, and also predicted that said polynucleotide may encode the polypeptide of SEQ ID NO 1.

In response, and without acquiescing to or agreeing with the rejections, applicants note that claims 3-7 and 11-14 have been cancelled.

Applicants further respectfully note that KAWAI discloses the sequence of cDNA, but does not disclose any function of the protein encoded by said cDNA. Therefore, even if one of ordinary skill in the art could guess that said cDNA encodes a sialyltransferase-like protein, one could not have predicted that it is α 2,3-sialyltransferase, α 2,6-sialyltransferase, or α 2,8-sialyltransferase and also could not have predicted that the substrate would be N-glycan, O-glycan, or glycolipid. The present invention reveals for the first time the detailed enzymatic properties, such as substrate specificity and substrate selectivity of the presently claimed enzyme. Indeed, the Office's attention is respectfully directed to the recitation of the particular substrate specificity, which is recited in the claims. This is especially true with regard to claim 9, which refers to the active domain. Applicants also respectfully submit that the methods of claims 8 and 15 are both novel and nonobvious over the cited art.

Accordingly, since the prior art does not provide all the elements of the claimed invention, withdrawal of the current rejection under 35 U.S.C. § 102(b) is respectfully requested.

Rejection under 35 U.S.C. § 102(a)

The Office Action rejects claims 1-15 under 35 U.S.C. § 102(a) as allegedly anticipated by Takashima et al. (JBC., 2002, Vol. 277(27), pp. 24030-24038) ("TAKASHIMA").

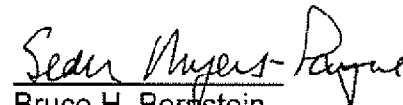
Applicants submit herewith a verified English translation of priority document JP 2002-21159, which was filed January 30, 2002. The Office is

invited to review the attached translation and determine its effect on the outstanding rejection over TAKASHIMA.

CONCLUSION

In view of the foregoing remarks and amendments, Applicants respectfully request withdrawal of the outstanding objections and rejections and the prompt mailing of a Notice of Allowance and Allowability. If there are any issues that remain, which may be resolved through telephone discussion, the Examiner is invited to telephone the undersigned.

Respectfully Submitted,
Shou TAKASHIMA et al.


Bruce H. Bernstein
Reg. No. 29,027 42,920

November 27, 2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191